

# DRAFT FISCAL NOTE

REQUEST NO.

RESPONDING AGENCY:	CODE:	DATE:	BILL NUMBER:
Office of the State Actuary	035	12/21/04	LEOFF 2 Total Disability

## SUMMARY OF BILL:

This bill impacts the Law Enforcement Officer's and Fire Fighters Retirement System plan 2 (LEOFF 2) by establishing a total disability benefit equal to 70 percent of a member's final average salary if they are disabled to the point where they cannot perform any substantial gainful activity. Substantial gainful activity is defined as average earnings of no more than \$810 per month in 2004, which shall be adjusted annually for inflation as determined by the director.

Effective Date: Immediately upon passage.

## CURRENT SITUATION:

Currently, disabled LEOFF 2 members are entitled to receive a minimum retirement allowance equal to 10 percent of such member's final average salary. The member shall additionally receive a retirement allowance equal to two percent of such member's average final salary for each year of service beyond five, and shall have the allowance actuarially reduced to reflect the difference in the number of years between age at disability and the attainment of age 53.

## MEMBERS IMPACTED:

We estimate that all of the 14,560 active members of this system, as well as all future active members could be affected by this bill. For a typical member, currently about 40 years of age with 11 years of service, an annual salary of \$66,000, and final average salary of \$61,000, the increase in annual disability benefits are shown below:

Current disability provision = 2% of average final compensation per year of service, actuarially reduced from 53 to age 40 =  $2\% \times \$61,000 \times 11 \times 0.3059 = \$4,105$  per year.

Proposed disability provision, non-duty related or non-total duty related disability = 2% of average final compensation per year of service, actuarially reduced (same as current provision) =  $2\% \times \$61,000 \times 11 \times 0.3059 = \$4,105$  per year.

Proposed disability provision, duty-related, total disability = 70% of average final compensation, no actuarial reduction =  $70\% \times \$61,000 = \$42,700$  per year.

We expect that in the first year after the effective date, approximately 11 members would have duty-related total disabilities.

## ASSUMPTIONS:

The costs depend on our assumptions for the probability of disablement and post-disablement mortality. This includes assumptions for total disability and duty-related disability. We needed to increase our existing assumptions for rates of disability because currently members who become disabled may elect to receive terminated vested benefits or retirement benefits because the disability benefits are the actuarial equivalent of those benefits. The availability of the tax-free 70% of pay benefit would change members' selection of benefits.

We changed our disability assumption to use rates based on the disablement rates used by the Colorado Fire and Police Pension Association Death and Disability Fund for their January 1, 2004 valuation prepared by Mellon. We used 85% of the Colorado rates to reflect our assumption that 85% of disabilities are duty-related. We assume that 18% of all duty-related disabilities are total disabilities.

Otherwise, we used the same assumptions as disclosed in the 2003 actuarial valuation report. We did not change our assumption for post-disablement mortality (although the mortality experience for those severely disabled would be expected to be less favorable than for those with occupational disabilities). Also, we did not include any waiting period for benefit commencement.

We used geometric interpolation for the rates in between the following ages:

Age	Annual Rate of Disablement
	Per 1,000 Members
20	1.01
30	1.28
40	2.47
45	3.36
50	11.76
55	28.91

For example, for a 55 year old member, we used a rate of 85% of 18% of 0.0289, or 0.004423, for total disability.

We reduced our decrements from other causes such as termination and retirement to be consistent with the higher disability rates. The total number of expected members leaving the system each year remained the same. In other words, we shifted some members from the category of termination or retirement to disability.

We assumed that disability rates would continue past eligibility for early and normal retirement. We considered but did not include any liability for members who might choose a taxable retirement benefit based on long service, such as greater than 40 years, over the 70% of pay tax-free disability benefit. In other words, because the 70% is tax-free, we assumed that members would choose to take this disability benefit instead of a greater retirement benefit that is taxable.

We changed the disability assumptions to determine the base liabilities first, then added the proposed disability benefits. With everything else being equal, using higher disability rates would reduce the plan liabilities, because the mortality experience of disabled pensioners is less favorable than the experience of healthy pensioners. The cost of the proposed benefit improvement is based on the difference in the liabilities after the assumption change.

The assumption that 85% of disabilities are duty related is constant at all ages. Alternatively, we could have assumed that the percentage of disabilities that are duty related are higher at the younger ages and lower at the higher ages. This would have reduced the costs slightly.

## **FISCAL IMPACT:**

### **Actuarial Determinations:**

The bill will impact the actuarial funding of the system by increasing the present value of benefits payable under the System and the required actuarial contribution rate as shown below:

<b>System: Law Enforcement Officers' and Firefighters' Plan 2</b>			
<i>(Dollars in Millions)</i>	<b>Current</b>	<b>Increase</b>	<b>Total</b>
<b>Actuarial Present Value of Projected Benefits</b> (The Value of the Total Commitment to all Current Members)	\$4,382.92	\$49.64	\$4,432.56
<b>Unfunded Actuarial Accrued Liability</b> (The Portion of the Plan 1 Liability that is Amortized at 2024)	\$0.00	\$0.00	\$0.00
<b>Unfunded Liability (PBO)</b> (The Value of the Total Commitment to all Current Members Attributable to Past Service)	\$(546.57)	\$30.14	\$(516.43)
<b>Increase in Contribution Rates: (Effective 09/01/2005)</b>			
Employee	0.25%		
Employer	0.15%		
State	0.10%		

## Fiscal Budget Determinations:

As a result of the higher required contribution rate, the increase in funding expenditures is projected to be:

<b>Costs (in Millions):</b>	<b><u>LEOFF 2</u></b>
<b>2005-2007</b>	
<b>State:</b>	
General Fund	\$2.2
Non-General Fund	<u>0.0</u>
<b>Total State</b>	<b>\$2.2</b>
Local Government	\$3.3
Total Employer	\$5.5
 Total Employee	 \$5.5
<b>2007-2009</b>	
<b>State:</b>	
General Fund	\$2.6
Non-General Fund	<u>0.0</u>
<b>Total State</b>	<b>\$2.6</b>
Local Government	\$4.0
Total Employer	\$6.6
 Total Employee	 \$6.6
<b>2005-2030</b>	
<b>State:</b>	
General Fund	\$53.3
Non-General Fund	<u>0.0</u>
<b>Total State</b>	<b>\$53.3</b>
Local Government	\$80.0
Total Employer	\$133.3
 Total Employee	 \$133.3

## STATEMENT OF DATA AND ASSUMPTIONS USED IN PREPARING THIS FISCAL NOTE:

The costs presented in this fiscal note are based on our understanding of the bill as well as generally accepted actuarial standards of practice including the following:

1. Costs were developed using the same membership data, methods, assets and assumptions as those used in preparing the September 30, 2003 actuarial valuation report of the Law Enforcement Officers' and Firefighters' Retirement System except for the disability rates disclosed in this fiscal note.
2. As with the costs developed in the actuarial valuation, the emerging costs of the System will vary from those presented in the valuation report or this fiscal note to the extent that actual experience differs from that projected by the actuarial assumptions.
3. Additional assumptions used to evaluate the cost impact of the bill which were not used or disclosed in this fiscal note or the actuarial valuation report include the following: None.
4. The analysis of this bill does not consider any other proposed changes to the system. The combined effect of several changes to the system could exceed the sum of each proposed change considered individually.
5. This fiscal note is intended for use only during the 2005 Legislative Session.
6. The funding method used for Plan 1 utilizes the Plan 2/3 employer/state rate as the Normal Cost and amortizes the remaining liability (UAAL) by the year 2024. Benefit increases to Plan 2/3 will change the UAAL in Plan 1. The cost of benefit increases to Plan 1 increases the UAAL.
7. Plan 2/3 utilizes the Aggregate Funding Method. The cost of Plan 2/3 is spread over the average working lifetime of the current active Plan 2/3 members.
8. The cost increases for the bill used to determine the increase in funding expenditures for future new entrants are 0.18% for LEOFF Plan 2 members and 0.18% for LEOFF Plan 2 employers, based on 50% of a total entry age normal cost increase of 0.36% for members and employers.

## GLOSSARY OF ACTUARIAL TERMS:

**Actuarial Present Value:** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions (i.e. interest rate, rate of salary increases, mortality, etc.)

**Projected Benefits:** Pension benefit amounts which are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

**Normal Cost:** Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

**Unfunded Actuarial Accrued Liability (UAAL):** The cost of Plan 1 is divided into two pieces:

- The Normal Cost portion is paid over the working lifetime of the Plan 1 active members. The remaining cost is called the UAAL.
- The UAAL is paid for by employers as a percent of the salaries of all plan 1, 2 and 3 members until the year 2024.

**Pension Benefit Obligation (PBO):** The portion of the Actuarial Present Value of future benefits attributable to service credit that has been earned to date (past service).

**Unfunded Liability (Unfunded PBO):** The excess, if any, of the Pension Benefit Obligation over the Valuation Assets. This is the portion of all benefits earned to date that are not covered by plan assets.